ABSTRACT

A glass container has a faceplate, a side tube, and a bottom. A photocathode is formed on the inner side of the faceplate. The glass container includes a first dynode, a second dynode, a screen focusing electrode, a dynode array, and an anode. The screen focusing electrode consists of a first screen, a second screen, a flat plate, and an aperture. The first screen is provided on the first dynode side of the aperture and extends across the lower end of the first dynode towards the photocathode. The second screen is provided on the second dynode side of the aperture and extends across the lower end of the second dynode towards the photocathode. A Venetian blind type is provided as the dynode array. The first dynode, the second dynode, the dynode array, and the anode are maintained at the potential which is higher than that of the photocathode. Electrons emitted from the photocathode in response to incident light thereon efficiently impinge on the dynodes regardless of where the electrons are emitted. The electrons are multiplied and then detected by the anode.